REMARKS

Applicants respectfully request consideration of the subject application as amended herein. This Amendment is submitted in response to the Office Action mailed June 3, 2005. Claims 1-28 are rejected. Claims 24, 25, and 28 are objected. In this Amendment, Claim 24 has been amended for formality purpose.

Claims Objections

The Examiner has objected to claims 24, 25, and 28. The Examiner stated that claims 24, 25, and 28 are method claims and claim an apparatus. Applicants respectfully disagree as to the confusing formality. Applicants submit that the claims are pertaining to claiming a method that use the therapeutic guidewire as recited in the claims. Applicants respectfully request the Examiner to withdraw the objections.

Rejections under 35 U.S.C. § 103 (b)

The Examiner has rejected claims 1-8, 9 and 22-25 under 35 U.S.C. §103(b) as being unpatentable over Tenerz, et al., of record in view of Engelson (U.S. Patent No. 5,599,492, hereinafter "Engelson").

Applicants respectfully disagree. As the Examiner stated, Tenerz did not teach a tapered section and a distal plunge-ground length. Applicants' claims 1-8, 9 and 22-25 require, among other features, that the "flexible distal core section having a tapered length and a distal plunge-ground length." The Examiner stated further that Engelson in the same field of endeavor taught a tapered section and a distal plunge-ground length because this increases flexibility of the guidewire. The Examiner then reasoned that it would have been

obvious to one skilled in the art at the time that the invention was made to have modified Tenerz to incorporate the teach of Engelson in order to allow to increase the flexibility of the guidewire.

Engelson however taught away from having the distal end that is tapered for increased flexibility. As taught by Engelson, when a tapered end is used to flexibility, the tapered section of the wire is encased in a wire coil, such to increase the column strength of the tapered wire section without significant loss of flexibility in this region. The "tapered guidewire construction just described is prepared, typically, by forming a fine-wire coil, cutting the coil to a desired length, and fastening the coil to the tapered distal end section of the guidewire, typically by soldering. This method of construction is relatively time consuming and costly in manufacture. Further, the solder attachment of the coil to the guidewire tip may crack during use, presenting the danger of having the coil separate from the wire within a vessel in the patient." (Engelson, col. 1, lines 41-60). Engelson then taught a distal end that has axially spaced grooves to increase the flexibility.

Additionally, there is no motivation to combine Engelson to Tenerz to form a guidewire having an optical fiber as claimed in claims 1-8, 9 and 22-25 with a guidewire that has a tapered distal end. A tapered flexible part would be too small to contain the pressure sensor described by Tenerz. Even more so, a tapered flexible part with a plunge-ground length would be too small to contain the pressure sensor described by Tenerz. Therefore, it would have not been obvious to one of ordinary skill in the art to combine Tenerz and Engelson to derive to Applicants' invention as claimed in claims 1-8, 9 and 22-25.

More importantly, Engelson did not teach a tapered end and a distal plunge-ground length. Throughout the teaching of Engelson, there was no teaching of a plunge-ground length at a tapered distal end of the guidewire.

On the other hand, Applicants' invention as recited in claims 1-8, 9 and 22-25 require a distal core section that has a tapered length and a distal plunge-ground length for even more drastic effect of increasing flexibility in the distal section.

Nothing in Tenerz and Engelson, alone or in combination taught the feature of a distal core section that has a tapered length and a distal plunge-ground length as described by Applicants' invention. Applicants further submit that a tapered end does not encompass a tapered end with a plunge-ground length.

With respect to the Examiner's argument that it would have been obvious to a person of ordinary skill in the art to have the optical fiber being moveable within the therapeutic guidewire, Applicants respectfully disagree. There is no evidence or common knowledge that it would have been obvious to have a moveable optical fiber within a guidewire as claimed in Applicants' claim 8.

For at least the reasons above, Applicants respectfully request the withdrawal of the present rejection.

Rejections under 35 U.S.C. § 103 (a)

The Examiner has rejected claims 11-17, and 19-21 under 35 U.S.C. §103(a) as being unpatentable over Tenerz, et al., in view Engelson and further in view of Jafari and Hurtak, et al. of record.

Claims 11-17 and 19-21 depend either directly or indirectly form claim 6 and thus each includes the limitation of "flexible distal core section having a tapered length and a distal plunge-ground length." As discussed above, nothing in Tenerz and Engelson taught this limitation.

Additionally, Jafari taught

> The distal core portion 12 has at least one tapered section 21 which becomes smaller in the distal direction. A helical coil 22 is disposed about the distal core section 12 and is secured by its distal end to the distal end of shaping ribbon 23 by a mass of solder which forms rounded plug 24 when it solidifies. The proximal end of the helical coil 22 is secured to the distal core section 12 at a proximal location 25 and at intermediate location 26 by a suitable solder.

(Jafari, col. 6, lines 14-22, and FIG. 1)

Nothing in Jafari taught, suggested, or motivated a distal core section as claimed in claims 11-17 and 19-21 ("flexible distal core section having a tapered length and a distal plunge-ground length.").

Hurtak disclosed a medical guidewire for used with MR systems. Hurtak taught

> The distal tip portion 3 of the guidewire 1 may be formed of a glass or plastic, as shown in FIG. 2, or of a metal as shown in FIGS. 8-13. The outer diameter of guidewire 1 preferably tapers to a smaller diameter toward the distal tip, as illustrated in FIGS. 8-13. The metal tip portion may be a material having a selected magnetic susceptibility, such as stainless steel, nickel titanium (nitinol), or tantalum. Preferably, the length of the metal distal tip segment is substantially shorter than the wavelength of the magnetic resonance field in which the guidewire is used.

(Hurtak, col. 3, lines 60-67, and FIGs 8-13)

Nothing in Hurtak taught, suggested, or motivated a distal core section as claimed in claims 11-17 and 19-21 ("flexible distal core section having a tapered length and a distal plunge-ground length.").

Applicants respectfully submit that there is no motivation to combine Tenerz, Engelson, Jafari, and Hurtak. As stated above, none of the reference taught a flexible distal core section having a tapered length and a distal plunge-ground length. Additionally, it would have not been obvious to a person of ordinary skill in the art to have a movable optical fiber or a fiber being exposed to the vasculature of the patient as the Examiner stated. Applicants submit that the Examiner is merely stating an advantage of substituting the

guidewire of Jafari or Hurtak without explaining what specific understanding or technological principle within the knowledge of one of ordinary skill in the art would have suggested the combination. Additionally, even if such motivation could have been found, there was no teaching, suggestion, or motivation of a "flexible distal core section having a tapered length and a distal plunge-ground length."

For at least the reasons above, Applicants respectfully request the withdrawal of the present rejection.

Double Patenting Rejection

Claim 3 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 19 of U.S. Patent No. 6,697,667. The terminal disclaimers in compliance with 37 CFR § 1.321 are filed herewith to overcome the provisional nonstatutory double patenting rejection only with respect to claim 3.

If the Examiner determines the prompt allowance of these claims could be facilitated by a telephone conference, the Examiner is invited to contact Mimi Dao at (408) 720-8300.

Deposit Account Authorization

Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due. Applicant believes that no Extension fee is required since the response is timely filed. Nevertheless, if it is deemed that an extension is required, then Applicant hereby requests such extension.

Pursuant to 37 C.F.R. 1.136(a)(3), applicant(s) hereby request and authorize the U.S. Patent and Trademark Office to (1) treat any concurrent or future reply that requires a petition for extension of time as incorporating a petition for extension of time for the appropriate length of time and (2) charge all required fees, including extension of time fees and fees under 37 C.F.R. 1.16 and 1.17, to Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

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